

## ABSTRACT

To provide an anodic oxidation method, a titanium oxide film manufacturing method and a catalyst carrying method which is suitable, for example, for anodic oxidation of aluminum, titanium and catalyst carrying on the surface of alumite (registered trademark), capable of generating an oxide film at a low cost and rapidly by eliminating the use of a strongly acid or strongly basic electrolytic solution and using a carbonated water as an electrolytic solution, capable of controlling the sealing treatment of oxide film through a simple method, capable of effecting the oxide film dyeing and catalyst carrying rationally and easily, and capable of effecting the catalyst carrying safely and surely without eroding a base material.

An object (3) to be treated is electrolyzed in an electrolytic solution received in a treatment vessel (1) serving the object (3) as an anodic electrode.

It is an anodic oxidation method in which an oxide film is generated on the surface of the object (3).

A carbonated water of a predetermined acid concentration generated by dissolving a pressurized carbon dioxide in a predetermined quantity of water (7) is used as the electrolytic solution.